



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,438	04/24/2002	Kuo-Liang Lin	8829-US-PA	4961

31561 7590 02/28/2005

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER

JELINEK, BRIAN J

ART UNIT

PAPER NUMBER

2615

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/063,438

Applicant(s)

LIN ET AL.

Examiner

Brian Jelinek

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

This is a first office action in response to application no. 10/063,438 filed on 4/24/2002 in which claims 1-12 are presented for examination.

Specification

The title of the invention is not descriptive because it has a typographical error. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-2, 5-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Takada et al. (U.S. Pat. No. 6,479,813).

Regarding claim 1, Takada et al. discloses a camera that can freely rotate with an angle of 360 degrees (col. 1, lines 8-15) comprising: a seat unit (Fig. 2, element 37); a plurality of conductive rolling units (because the conductive rings roll over the conductive contacts), allocated on one side of the seat (Fig. 2, element 36); a plurality of conductive lines, connected to the conductive rolling units corresponding thereto (Fig. 2,

Art Unit: 2615

element 39); a camera unit, comprising a plurality of transmission traces in a form of a concentric circular structure on one surface thereof (Fig. 2, element 34, concentric about 22), the camera unit functioning as a plurality of terminals of the camera unit, wherein the terminals include a power source terminal and an optional signal input/output terminal (Fig. 2, element 39; col. 5, lines 14-25); and a connecting-fitting unit, mounting the camera unit on the seat unit, allowing the conductive rolling units to be in electrical contact with the corresponding transmission traces, and allowing the camera to freely rotate over the side of the seat that has the conductive rolling units (Fig. 2, element 36; col. 4, lines 37-42).

Regarding claim 2, Takada et al. discloses a power source line and a signal line connected to the corresponding conductive rolling units of the seat to output signal and provide power required by the camera (Fig. 2, element 36; col. 5, lines 14-19).

Regarding claim 5, Takada et al. discloses a motor to rotate the camera unit (Fig. 1, element 24, tilt shaft coupled to a tilt motor).

Regarding claim 6, Takada et al. discloses the motor comprises a circuit board located on the other side of the camera (Fig. 1, element 27).

Regarding claim 7, Takada et al. discloses the connecting-fitting unit further comprises a bearing to allow the camera unit to freely rotate thereon (col. 4, lines 37-42; col. 1, lines 8-15).

Regarding claim 8, Takada et al. discloses the camera comprises either a suspension type or a desktop (Fig. 1).

Regarding claim 9, Takada et al. discloses a rotatable input/output terminal structure, applicable for power supply and signal input/output of an electronic apparatus, wherein the electronic apparatus is installed on a seat and has the function of freely rotating with an angle of 360 degrees (Fig. 2; col. 1, lines 8-15), the input/output terminal structure comprising: a plurality of transmission traces formed on one side of the electronic apparatus (Fig. 2, element 34), wherein the transmission traces have a concentric circular structure (Fig. 2, concentric about 22) and are electrically connected to a plurality of terminals of the electronic apparatus (Fig. 2, element 36), including a power source terminal and a optional signal input/output terminal (col. 5, lines 14-25); a plurality of conductive rolling units (Fig. 2, element 36, because the conductive rings roll over the conductive contacts), allocated on one side of the seat (Fig. 2, element 37), wherein a position of each of the conductive rolling units is corresponding to one of the transmission traces (Fig. 2, elements 34 and 36), and when the electronic apparatus is installed on the seat, the conductive rolling units are in electric contact with the transmission traces to allow the electronic apparatus to rotate over the seat (col. 4, lines 37-42); and a plurality of conductive lines, electrically connected to the conductive rolling units to provide a power source and a signal input/output to the electronic apparatus (col. 5, lines 14-19).

Regarding claim 10, Takada et al. discloses a signal input/output method of a camera, comprising: forming a plurality of transmission traces on one side of a camera unit (Fig. 2, element 34), wherein the transmission traces have a concentric circular structure (Fig. 2, concentric about 22); connecting the transmission traces to a plurality

of corresponding terminals (Fig. 2, element 36), wherein the terminals include a power source terminal and an optional signal input/output terminal (col. 5, lines 14-19); providing a seat unit (Fig. 2); allocating a plurality of conductive rolling units (because the conductive rings roll over the conductive contacts) on one side of the seat unit (Fig. 2, element 36), wherein a position of each conductive rolling unit corresponds to a position of the corresponding transmission trace (Fig. 2, elements 34 and 36); providing a plurality of conductive lines to connected to the conductive rolling units (Fig. 2, element 38); and mounting the camera unit on the seat to bring the conductive rolling units in electrical contact with the transmission traces, wherein the camera unit can freely rotate over the seat (Fig. 2).

Regarding claim 11, Takada et al. discloses connecting the conductive rolling units to the corresponding conductive lines (Fig. 2, elements 36 and 39).

Regarding claim 12, Takada et al. discloses allocating a motor to the camera unit for rotating the camera (Fig. 1, element 24, tilt shaft coupled to a tilt motor).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takada et al. (U.S. Pat. No. 6,479,813) in view of Canizales, Jr. (U.S. Pub. No. 2003/0073325).

Regarding claim 3, Takada does not disclose the conductive rolling units correspond to three of the conductive rolling units positioned with a 120 degrees between each other.

However, Canizales, Jr. discloses a slip plate assembly where each rolling member of a plurality of rolling members contact a first and second electroplate to create an electrical path there between (Abstract; Fig. 1). Furthermore, Canizales, Jr. shows that the conductive rolling units correspond to three of the conductive rolling units positioned with 120 degrees between each other (Fig. 3) because the conductive rolling units are placed continuously around the point of rotation. One of ordinary skill in the art would have provided rolling members comprising bearings for the purpose increasing operational life by reducing frictional wear between the moving electrical contacts (par 5-6). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided conductive rolling units comprising bearings placed continuously around the point of rotation, comprising three of the conductive rolling units positioned with 120 degrees between each other, for the purpose increasing operational life by reducing frictional wear between the moving electrical contacts.

Regarding claim 4, Canizales, Jr. further discloses each conductive rolling unit comprises a conductive rolling wheel (Fig. 2, elements 71 and 72), a conductive rolling

Art Unit: 2615

bearing of the conductive rolling wheel (Fig. 2, element 76), and a supporting frame to support the conductive rolling bearing (Fig. 3, element 73).

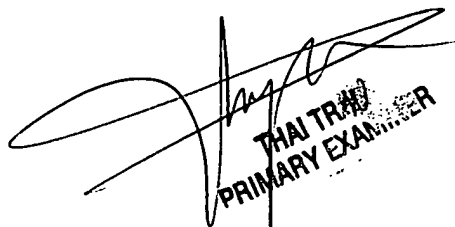
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Brundage (U.S. Pat. No. 6,331,117) discloses a low-profile rotatable electrical connector having concentric conductors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Jelinek whose telephone number is (703) 305-4724 until 3/2/2005, and (571)272-7366 thereafter. The examiner can normally be reached on M-F 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Thai Tran can be reached at (703) 305-4725. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



THAI TRAN
PRIMARY EXAMINER